



96TH GENERAL ASSEMBLY

State of Illinois

2009 and 2010

SB1489

Introduced 2/18/2009, by Sen. Iris Y. Martinez

SYNOPSIS AS INTRODUCED:

New Act

Creates the Green Infrastructure for Clean Water Act. Requires the Illinois Environmental Protection Agency to adopt comprehensive storm water management rules that meet certain requirements by July 1, 2012. Requires the Agency, beginning in 2010, to implement a storm water permit fee program adequate to support the adoption and implementation of State storm water regulations as required by the Act. Requires the Agency to establish a Statewide standard for storm water management programs in order to transition toward the use of green infrastructure as the predominant storm water management strategy. Requires the Agency to review its rules on the distribution of money from the Water Revolving Fund and to endeavor to establish new criteria which prioritize the use of green infrastructure in all projects involving storm water management and water efficiency.

LRB096 10752 JDS 20941 b

1 AN ACT concerning safety.

2 **Be it enacted by the People of the State of Illinois,**
3 **represented in the General Assembly:**

4 Section 1. Short title. This Act may be cited as the Green
5 Infrastructure for Clean Water Act.

6 Section 5. Definitions. As used in this Act:

7 "Agency" means the Illinois Environmental Protection
8 Agency.

9 "Green infrastructure" means any storm water management
10 technique or practice employed with the primary goal of
11 preserving, restoring, or mimicking natural hydrology. Green
12 infrastructure includes, but is not limited to, methods of
13 using soil and vegetation to promote soil percolation,
14 evapotranspiration, and filtration. Green infrastructure
15 includes the preservation and restoration of natural landscape
16 features, such as forests, floodplains, headwaters, and
17 wetlands. Green infrastructure also includes rain gardens,
18 permeable pavements, green roofs, infiltration planters, trees
19 and tree boxes, and rainwater harvesting for non-potable uses,
20 such as toilet flushing and landscape irrigation.

21 Section 10. Legislative findings.

22 (a) The General Assembly finds:

1 (1) that storm water, when not properly controlled and
2 treated, causes pollution of the waters of the State,
3 threatens public health, and damages property by carrying
4 pollutants from our highways, streets, roads, parking
5 lots, driveways, sidewalks, alleys, lawns, and other
6 surfaces of low permeability into lakes, rivers, streams,
7 ponds, and drinking water aquifers;

8 (2) that development often results in increased storm
9 water runoff by increasing the size and number of paved and
10 other impervious surfaces within the State and decreasing
11 the amount of natural surface areas that naturally control
12 storm water runoff through natural filtration and
13 groundwater recharge systems;

14 (3) that current threats to the State's water resources
15 include the effects of improper storm water management,
16 such as pollution, increased water temperatures, flooding,
17 groundwater depletion, loss of habitat, stream bank
18 erosion, sewer overflows, basement backups, contaminated
19 drinking water sources, and sedimentation of waterways;
20 and

21 (4) that these harms can be minimized and water
22 resources made more resilient through better management of
23 natural infrastructure and expanded use of green
24 infrastructure, often at comparable or lower costs than
25 other approaches that provide fewer benefits.

26 (b) The General Assembly also finds that the benefits from

1 the use of green infrastructure include:

2 (1) Cleaner Water. Green infrastructure reduces the
3 volume of storm water runoff in combined and separate sewer
4 systems and the frequency of combined sewer overflows, and
5 it reduces the concentrations of pollutants in those
6 discharges.

7 (2) Enhanced Water Supplies. Most green infiltration
8 approaches involve allowing storm water to percolate
9 through the soil where it recharges the groundwater and the
10 base flow for streams, thus ensuring adequate water
11 supplies for humans and more stable aquatic ecosystems.
12 Other green infrastructure techniques that capture and
13 reuse storm water also conserve water supplies.

14 (3) Reduced Flooding. Green infrastructure controls
15 surface flooding and stabilizes the hydrology so that peak
16 stream flows are reduced.

17 (4) Cleaner Air. Trees and vegetation improve air
18 quality by filtering many airborne pollutants, thereby
19 reducing the incidence of respiratory illness.

20 (5) Reduced Urban Temperatures. Trees and other
21 vegetation create shade, reduce the amount of heat
22 absorbing materials, and emit water vapor, which controls
23 surface temperature, thus helping to alleviate the urban
24 heat island effect. Limiting impervious surface, using
25 light colored impervious surfaces, and green roofs also
26 mitigate urban temperatures.

1 (6) Resilience to the Impacts of Climate Change.
2 Climate change impacts and effects vary regionally, but
3 green infrastructure techniques provide adaptation
4 benefits for a wide array of circumstances by conserving
5 and reusing water, promoting groundwater recharge,
6 reducing surface water discharges that could contribute to
7 flooding, and reducing storm water pollution and storm
8 water flows into combined sewers that trigger overflows.

9 (7) Climate Change Mitigation Benefits. Green
10 infrastructure reduces energy demands and, thus,
11 greenhouse gas emissions by reducing the amount of storm
12 water and related pollution needing treatment, reducing
13 the amount of potable water needed, providing thermal
14 insulation and shade for buildings, and mitigating the
15 urban heat island effect. Vegetation and wetlands also
16 provide carbon sequestration.

17 (8) Increased Energy Efficiency. By helping to lower
18 ambient temperatures and, when incorporated on and around
19 buildings, helping to shade and insulate buildings from
20 wide temperature swings, green infrastructure reduces the
21 energy needed for heating and cooling. Green roofs and
22 shade increase the life span of roofs, thus reducing the
23 need for production and transportation of conventional
24 roof materials. Energy use associated with pumping and
25 treating is reduced as storm water is diverted from
26 wastewater collection, conveyance, and treatment systems.

1 Greater energy efficiency reduces costs and the generation
2 of greenhouse gases.

3 (9) Source Water Protection. Green infrastructure
4 practices provide pollutant removal benefits, thereby
5 providing protection for both ground water and surface
6 water sources of drinking water. In addition, green
7 infrastructure provides groundwater recharge benefits by
8 putting storm water back into the ground, and it enhances
9 surface water quality by redirecting the high volume and
10 velocity flows that scour stream banks and muddy drinking
11 water sources.

12 (10) Wildlife Habitat. Stream buffers, wetlands,
13 parks, meadows, and other forms of green infrastructure
14 increase biodiversity within the urban environment.

15 (11) Community Benefits. Trees and plants improve
16 urban aesthetics and community livability by providing
17 recreational and scenic wildlife areas. Studies show that
18 property values are higher, violence is reduced, and crime
19 is reduced when trees and other vegetation are present.

20 (12) Health Benefits. Studies show that people who have
21 access to the open space provided by green infrastructure
22 in their communities get more exercise, live longer, and
23 report better health in general. Exposure to green
24 infrastructure (even through a window) improves mental
25 functioning, reduces stress, and reduces recovery time
26 from surgery.

1 (13) Green Jobs. Designing, installing, and
2 maintaining green infrastructure creates new jobs for
3 architects, designers, engineers, construction workers,
4 maintenance workers, landscapers, nurseries, and related
5 services.

6 (14) Cost Savings. Green infrastructure saves (i)
7 capital costs associated with paving, constructing curbs
8 and gutters, building large collection and conveyance
9 systems, and digging big tunnels and centralized storm
10 water detention ponds; (ii) operating and maintenance
11 expenses for treatment plants, pumping stations, pipes,
12 and other hard infrastructure; (iii) energy costs for
13 pumping water; (iv) costs associated with treatment during
14 wet weather; and (v) costs of repairing the damage caused
15 by storm water, such as stream bank restoration and flood
16 damage.

17 Section 15. Performance standards and use of green
18 infrastructure. The Agency shall, by July 1, 2012, adopt
19 comprehensive storm water management rules incorporating the
20 following minimum requirements:

21 (a) Performance standards for private and public
22 land-disturbing activities, including development,
23 redevelopment, and significant maintenance, replacement, and
24 repair projects, that preserve to the greatest extent
25 practicable, minimum water quality standards, maximum

1 detention release rates, and the pre-development groundwater
2 recharge and infiltration rates on site.

3 (b) A preference for the use of green infrastructure best
4 management practices, strategies, and techniques to comply
5 with the performance standards.

6 (c) A requirement to demonstrate, post-development, that
7 the storm water management practices implemented at the site
8 comply with the performance standards, and that
9 post-development peak discharge rates do not exceed
10 pre-development peak discharge rates.

11 Section 20. Permit fees. The Agency shall implement a storm
12 water permit fee program, effective in 2010, adequate to
13 support the adoption of storm water regulations as required
14 under Section 15, and the ongoing administration and
15 enforcement of those regulations, including funding for
16 education, guidance, and other services to assist the regulated
17 community in understanding and implementing green
18 infrastructure strategies and techniques.

19 Section 25. Green infrastructure portfolio standard goal.
20 The Agency shall establish a Statewide standard for storm water
21 management programs (similar to the Illinois "Renewable Energy
22 Portfolio Standard") to transition all such programs toward the
23 use of green infrastructure as the predominant strategy. Over a
24 period of years, the standard shall gradually increase the

1 percentage of annual storm water runoff volume managed with
2 green infrastructure.

3 Section 30. Water Revolving Fund criteria. The Agency shall
4 review the rules on the distribution of money from the Water
5 Revolving Fund and endeavor to establish new criteria that
6 prioritize the use of green infrastructure in all projects
7 involving storm water management and water efficiency.